CD 216– 12/10/2013 - Page 1

BROOKLYN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK FACULTY COUNCIL

Meeting of 12/10/2013

The Committee on Graduate Curriculum and Degree Requirements herewith submits its recommendations in Curriculum Document 216

Respectfully submitted,

David Grubbs – Conservatory of Music Wen-Song Hwu – Childhood, Bilingual and Special Education Rosamond King – English Sandra Kingan – Mathematics Paula Whitlock – Computer and Information Science, Chairperson

Members of Faculty Council with any questions are urged to contact **Paula Whitlock** at **whitlock@brooklyn.cuny.edu** prior to the meeting.

TABLE OF CONTENTS

	Pages
SECTION A-III: CHANGES IN DEGREE REQUIREMENTS	3
Department of Computer and Information Science	3
M.S. degree program in health informatics	3
Department of Political Science	5
M.A. in Political Science	5
SECTION A-IV: NEW COURSES	6
Department of Art	6
ARTD 7146G: Topics in Native American Art of the U.S. and Canada	6
ARTD 7175 Ancient to Modern Iconoclasm	7
Department of Finance and Business Management	8
BUSN 7276X Business Analytics	9
Department of Physics	10
PHYS 7650: Physics and Society	10
SECTION A-V: CHANGES IN EXISTING COURSES	11
Department of Childhood, Bilingual and Special Education	11
Department of Computer and Information Science	14
Department of Secondary Education	16
APPENDIX	17
BIOL 7933 Special Topics: Global Bacterial, Protozoan and Viral killers	17
BIOL 7933: Special Topics: Molecular Phylogenetics	17
ECON 7090: Special Topics: Ecological Economics	17
MUSC U7633X: Special Topics Seminar: Music Education - Curriculum and	
Assessment in Music Education	17
MUSC 7631 Special Topics Seminar: History - History of Sound Art	17

SECTION AIII: CHANGES IN DEGREE PROGRAMS

Department of Computer and Information Science

Date of departmental approval: November 13, 2012 **Effective Date:** September, 2014

Clearances: Health and Nutrition Sciences, Kinesiology

M.S. degree program in computer science and health science <u>health informatics</u> SED program code 86190

The master of science, computer science and health science <u>health informatics</u> program, offered in conjunction with the Department of Computer and Information Science, focuses on the use of technology in a wide range of health care and medical services. It is the only degree program of its kind in the New York City area.

Matriculation requirements

Applicants must offer at least 18 credits in undergraduate or graduate courses in health and nutrition sciences and/or health-related fields. <u>Applicants are also expected to have the equivalent of at least 12 credits in computer and information science, including all of the following: knowledge of a high-level computer language (preferably C++ or Java), a course in discrete structures and a course in data structures. Students who do not have all of these requirements can be accepted with the condition that they complete these courses at the undergraduate level.</u>

General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission."

Degree requirements

Thirty to 52 credits are required for the degree.

Students must complete the following courses in Group I and Group II.

Group I: All of the following: Computer and Information Science 6001X, 6002X, 6005X, 6006X; and Mathematics 6652X.

Students with some background in computer and information science and statistics (either academic or professional) may apply to the Department of Computer and Information Science for waivers of specific courses. Normally, students with a strong undergraduate background in computer and

information science will be exempt from all courses in Group I. Students exempt from Group I courseswill not be required to take other courses to make up any specific number of credits. Group II: All of the following:

1. One course chosen from Computer and Information Science 713X, 7200X, 7540X, 7354X, and 7522X, <u>7532X and 7534X</u>;

2. Two courses chosen from Computer and Information Science 710X, 7510X, and 7500X; <u>Computer</u> and Information Science 7500X, 7510X, 7530X and 7450X;

3. One additional Computer and Information Science course numbered 7000 or above;

4. <u>Three courses chosen from</u> Health and Nutrition Sciences <u>7110X</u>, 7120X, <u>7130</u>, <u>7140X</u> and <u>7145X</u>, and <u>7930X</u> and <u>Kinesiology 7000X</u>, <u>7044X</u>, <u>7100X</u> and <u>7342X</u>;

5. One additional Health and Nutrition Sciences course numbered 7000 or above;

6. Computer and Information Science 7450X or Health and Nutrition Sciences 7161X.

7. Students must also complete one of the following:

a) Computer and Information Science 7990G and 7992G and a thesis acceptable to the Department of Computer and Information Science; or

b) <u>Computer and Information Science 7900X and a project acceptable to the Department of</u> <u>Computer and Information Science</u><u>Health and Nutrition Sciences 7999X and a thesis or project</u> acceptable to the Department of Health and Nutrition Sciences; or

Pass a written comprehensive examination. <u>Kinesiology 7990X and a project acceptable to the</u> <u>Department of Kinesiology</u>, with the approval of the Chair or Graduate Deputy of the Department of <u>Kinesiology</u>.

Rationale:

The joint master's degree in Computer Science and Health Science was suspended several years ago when the HNS Department decided to pursue other areas of interest. However, the CIS Department received numerous requests for admission into the program every semester. The CIS Department has therefore decided to offer the degree itself and has expanded the health offerings by including courses in both the HNS Department and the Kinesiology Department.

Department of Political Science

Date of Approval by Department: September 10, 2013 Effective Date: Fall 2014

M.A. in Political Science HEGIS code 2207; SED program code 02109

Degree requirements for political science concentration

Political Science: The requirements for the concentration in political science are:

1. *Credits:* Thirty credits, all from 7000-level courses. With the permission of the deputy chairperson, a maximum of 12 credits (four courses) may be transferred from graduate courses in other departments or other universities to substitute for any requirement below.

2. *Distribution:* Courses are grouped into four main areas of study: American government (POL 7200x-7590X), comparative politics (POL 7700x-7890x), international relations (POL 7600X-7690X), and political theory (POL 7010X-7190X, excluding 7000160X and 7170X). A minimum of 9 credits must be from one of these areas, which will be the student's specialization, and a minimum of 3 credits from each of the other three areas. Note: The statistics course (POL 700) does not count for the political theory requirement.

Rationale:

There are two changes requested. The first is to correct a typo in the current bulletin in which POLS 7160X was printed as POLS 7000X. The second is to simplify the language by deleting the redundant sentence at the end.

SECTION A-IV: NEW COURSE

Department of Art

Date of approval by department: September 10, 2013 **Effective date:** Fall 2014

ARTD 7146G Topics in Native American Art of the U.S. and Canada 45 hours; 3 credits

Bulletin Description: Examination of the visual arts of native North American cultures from the Eskimo to Canada, the Northwest and Southwest areas of the United States, the Plains, and Eastern Indian societies. Consideration of the visual arts in their historical and contemporary contexts, and in media such as architecture, painting, pottery, sculpture, textiles, and performance.

Prerequisite: matriculation for the M.A. in art history or permission from the department chair

Frequency of offering: Every 3-4 semesters

Projected enrollment: 10-15 students

Clearances: None

Rationale: This class offers a broad introduction to the art and architecture produced among First Nation Americans. It examines the visual arts in both historical and contemporary contexts. While the course is arranged geographically, where possible the connections between these cultural areas will be stressed. It addresses the effects of colonization, Euro-American patronage, as well as of new marketplaces, materials, technologies.

Successful completion of this course will prepare students to enroll in other upper-division art history courses. It relies on primary and secondary sources to introduce students to the historical moment and issues in the field.

This course works in conjunction with other courses in the department, especially the non-Western art, pre-Columbian and colonial Latin American courses. It expands upon the strengths of the department's current courses focused on Western culture by examining the arts of First Nation Americans of the U.S. and Canada, which showcases the unique intersection of cultures and ideas over a wide geographic expanse and time periods. A course focusing on the rich cultures of these areas will allow students to engage with themes about cultural contact, economic and environmental changes, collecting exotica, hybridity, religious syncretism, race and gender, modernism, and contemporary issues.

CD 216 - 12/10/2013 Page 7

Lastly, this course addresses two of the Art Department's program goals. Students will (1) "learn to analyze works of art critically from both an historical and an interpretative point of view; in addition, they will gain an understanding of the importance of cultural diversity through exposure to the arts of many different times and places"; and (2) "have extensive practice in articulating aesthetic judgments effectively in spoken and written form."

In addition, this course meets all of the learning objectives of the department, which include having students (1) "recognize and analyze theories of art," (2) "Use terms of art historical analysis correctly and be able to apply them to unfamiliar work," (3) "Formulate and defend critical judgments about works of art in the context of classroom discussions and exams," (4) Write clearly and analytically, with papers including precise thesis statements, well-constructed arguments and thoughtful conclusions, cleanly written and error-free," and (5) "Visit museums and art exhibitions frequently in order to learn to appreciate a wide and varied range of works of art."

Department of Art

Date of Department Approval: September 10, 2013 **Effective Date:** Fall 2014

ARTD 7175G Ancient to Modern Iconoclasm

45 hours; 3 credits

Bulletin Description: Examination of the practice of destroying images from c. 1500 B.C.E. to the present, with a focus on religious and politically motivated attacks.

Prerequisite: matriculation for the M.A. in art history or permission from the department chair

Frequency of offering: Every 3 to 4 semesters

Projected enrollment: 10-15 students

Clearances: none

Rationale:

Since the destruction of the World Trade Center towers in 2001, the theme of iconoclasm has attracted increasing attention from scholars and the general public. It has been the subject of major art exhibitions as well as scholarly monographs and colloquia, and has spurred new research concerning, for instance, Islamic attacks on figural images and political iconoclasm after the fall of the Iron Curtain. But in existing courses and standard textbooks, it is still generally CD 216 – 12/10/2013 Page 8

presented as a limited and isolated phenomenon, discussed only in relation to Byzantium and the Protestant Reformation.

This course draws on recent scholarship and new methods to demonstrate the significance of iconoclasm throughout the history of art. In so doing, it offers new ways of looking at major monuments — e.g., the Ancient Near Eastern stele of Naram-Sin or the colossal portrait of the Roman emperor Constantine — and also brings attention to less familiar, yet significant works such as the Bamiyan Buddhas destroyed by the Taliban. The course uses the cultural resources of the New York area (e.g., the exceptional collections of the Brooklyn Museum, the Cloisters, and the Metropolitan Museum of Art as well as public monuments such as the World Trade Center memorial) to make the issues surrounding the destruction of art vivid to today's students. And it integrates the study of iconoclasm with important new areas of inquiry in the field of art history such as the relation of mass culture and elite art-making and the materiality of images. Finally, it considers iconoclasm within a global perspective, examining case studies from both western and non-western art.

Major topics to be addressed include philosophical and theological definitions of images in Greece, Byzantium, and Islam; the connections between religious iconoclasm and political turmoil in Egypt, the Reformation, and the French Revolution; the materiality of art objects; and the changing roles and functions of art in society.

This course complements the department's current offerings in the field of art history, which focus on the creation, rather than the destruction, of works of art. It gives students a new perspective on the art they study in other courses, and also draws attention to interconnections among periods traditionally seen as very different. Furthermore, since iconoclasm is often dismissed as a "primitive" or barbaric response to art, the course offers an enhanced understanding of the motivations behind it; in so doing, it encourages a more nuanced perspective on a cultural practice of critical importance in the pre-modern world, and still relevant to today's society.

Department of Finance and Business Management

Date of Approval by the Department: November 12, 2013 **Effective Date:** Fall, 2014

BUSN 7276X Business Analytics

30 hours plus conference; 3 credits

Bulletin Description: Introduction to business analytics, data mining, and big data. Business intelligence; descriptive/predictive/prescriptive analytics; data warehouses and data marts; dashboards and scorecards; data visualization; text and web mining; data mining techniques in business decision making; business issues in analytics. Cases, projects and hands-on analytics software use.

Prerequisite: Undergraduate course in statistics and proficiency with spreadsheets

Frequency of Offering: Every semester

Projected enrollment: 25 students per semester

Clearances: None

Rationale: There is currently no analytics course offered in the Finance and Business Management Department, though making use of complex and disparate data has become one of the primary drivers of competitive advantage for large and small companies. Equally important, this course is designed to strengthen graduate students' ability to formulate insightful questions and actionable responses to real-world phenomena.

Department of Physics

Date of departmental approval: November 12, 2013 **Effective date:** Fall 2014

PHYS 7650: Physics and Society 45 hours; 3 credits

Bulletin Description: Technical quantitative study of topics related to society such as Gini Coefficients, tipping points, climate sensitivity, demographic distribution, frequency of extreme events; nuclear energy, prospects in fission and fusion; environmental problems; renewable energy sources, such as solar and wind power, energy storage.

Prerequisites: Good standing in the Physics Master's program or permission of the chairperson.

Frequency of Offering:	Once a year, spring semester
Projected enrollment:	1 section, 15 students.

Clearances: None

Rationale: Physics and Society is now a forum of the American Physical Society with its own publication; the most prestigious Physics journal – Physical Review Letters - includes a "catch all" section titled "Soft Matter, Biological and Interdisciplinary Physics". A "typical" article in this section is titled "Environmental Versus Demographic Variability in Two-Species Predator-Prey Model" (Physical Review Letters – 2012- by Ulrich Dobramysl and Uwe C. Taber). Last year (2012), a new division of the American Physical Society was formed that is dedicated to Climate Change. The new division is the "Topical Group on the Physics of Climate" (GPC). Miriam Webster Dictionary defines Physics, among other definitions: *science that deals with the structure of matter and the interactions between the fundamental constituents of the observable universe The goal of physics is to formulate comprehensive principles that bring together and explain all discernible phenomena. With 7 billion people (October 2012) and growing humans become part of the physical environment.*

For most our graduate students, the Master education is a terminal degree that should lead to job opportunities. The objective of the course is to explore career opportunities beyond the usual boundaries of textbooks that include human activities.

SECTION A-V: CHANGES IN EXISTING COURSES

Department of Childhood, Bilingual and Special Education Change in department prefix

Date of departmental approval: November 12, 2013 **Effective date:** Spring 2014

From: EDUC-7039X Special Topics in Education 45 hours; 3 credits

Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

TO: <u>CBSE</u> **7039X Special Topics in Education** 45 hours; 3 credits

45 hours, 5 creats

Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

Rationale: The Childhood, Bilingual and Special Education program is updating the course prefix to reflect the new departmental structure in the School of Education. This course was overlooked last go around.

Department of Childhood, Bilingual and Special Education

Change in department prefix

Date of departmental approval: November 12, 2013 Effective date: Spring 2014

From: EDUC 7040X Special Topics in Education 45 hours; 3 credits

Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

TO: <u>CBSE</u> 7040X Special Topics in Education

45 hours; 3 credits

Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

Rationale:

The Childhood, Bilingual and Special Education program is updating the course prefix t o reflect the new departmental structure in the School of Education. This course was overlooked last go around.

Department of Childhood, Bilingual and Special Education

Change in description

Date of departmental approval: November 12, 2013 Effective date: Spring 2014

FROM: CBSE 7671X Children and Youth with Special Needs

45 hours; 3 credits

Characteristics of children and youth with special needs including giftedness. Clinical practice in the classroom environment regarding assessment, curriculum, management, integrations and positive supports and interventions for students with special needs in general education settings. Review of regulatory compliance in special education. Focus on collaboration with other professionals including co-teaching, consultative and itinerant models. Engagement of family members in collaborative efforts. Clinical experiences in schools and a variety of communitysettings.

TO: CBSE 7671X Children and Youth with Special Needs

45 hours; 3 credits

Characteristics of <u>diverse student populations</u> with <u>a focus on English language learners and</u> <u>students</u> with special needs, <u>including the gifted</u>. Clinical practice in the classroom environment regarding assessment, curriculum, management, integrations and positive supports, and interventions for <u>English language learners and</u> students with special needs, <u>including the gifted</u> in general education settings. Review of regulatory compliance. Focus on collaboration with other professionals including co-teaching, consultative and itinerant models. Engagement of family members in collaborative efforts. Clinical experiences (20 hours) in special education <u>and/or inclusive classrooms required</u>.

Clearance: Cross listed with SEED 7671X

Rationale: To meet the new exam mandated by New York State Department of Education. The exam, Educating All Students (EAS) requires a focus not only on special education but also on English language learners.

Department of Computer and Information Science

Change in number of credits

Date of department approval: October 10, 2013 **Effective date:** Fall 2014

FROM:

CISC 7990G Thesis Research

Hours to be arranged; 2 credits

Research for the master's thesis supervised by a faculty member. No more than 6 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: permission of the chairperson.

TO:

CISC 7990G Thesis Research

Hours to be arranged; <u>3</u> credits

Research for the master's thesis supervised by a faculty member. No more than 6 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: permission of the chairperson.

Rationale:

Our research project course, CISC 7900, is three (3) credits and students in the thesis course, CISC 7990 do as much work as in CISC 7900 and deserve three credits for their efforts. Changing the number of credits will also bring the thesis course into alignment with other department's thesis courses.

Department of Computer and Information Science

Change in number of credits

Date of department approval: October 8, 2013 **Effective date:** Fall 2014

FROM:

CISC 7992G Thesis Research

Hours to be arranged; 2 credits

Research for the master's thesis supervised by a faculty member. No more than 6 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: Prerequisite: CIS 7990 and permission of the chairperson.

TO:

CISC 7992G Thesis Research

Hours to be arranged; <u>3</u> credits

Research for the master's thesis supervised by a faculty member. No more than 6 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: Prerequisite: CIS<u>C</u> 7990 and permission of the chairperson.

Rationale:

Our research project course, CISC 7902, is three (3) credits and students in the thesis course, CISC 7992 do as much work as in CISC 7902 and deserve three credits for their efforts. Changing the number of credits will also bring this thesis course into alignment with other department's thesis courses.

The CIS Department also wants to correct a typographical error in the on-line bulletin.

Department of Secondary Education

Change in description

Date of departmental approval: November 12, 2013 Effective date: Spring 2014

FROM: SEED 7671X Children and Youth with Special Needs

45 hours; 3 credits

Characteristics of children and youth with special needs including giftedness. Clinical practice in the classroom environment regarding assessment, curriculum, management, integrations and positive supports and interventions for students with special needs in general education settings. Review of regulatory compliance in special education. Focus on collaboration with other professionals including co-teaching, consultative and itinerant models. Engagement of family members in collaborative efforts. Clinical experiences in schools and a variety of communitysettings.

TO: SEED 7671X Children and Youth with Special Needs

45 hours; 3 credits

Characteristics of <u>diverse student populations</u> with <u>a focus on English language learners and</u> <u>students</u> with special needs, <u>including the gifted</u>. Clinical practice in the classroom environment regarding assessment, curriculum, management, integrations and positive supports, and interventions for <u>English language learners and</u> students with special needs, <u>including d the</u> <u>gifted</u>, in general education settings. Review of regulatory compliance. Focus on collaboration with other professionals including co-teaching, consultative and itinerant models. Engagement of family members in collaborative efforts. Clinical experiences (20 hours) in special education <u>and/or inclusive classrooms required</u>.

Clearance: Cross listed with CBSE 7671X

Rationale: To meet the new exam mandated by New York State Department of Education. The exam, Educating All Students (EAS) requires a focus not only on special education but also on English language learners.

Appendix

Special Topics: The committee has approved the following special topic for the term indicated and informed the Provost of the committee's approval. These items do not require Faculty Council action and are announced here for information only.

These topics are being offered for the first time:

BIOL U7933G Seminar in Special Topics: Global Bacterial, Protozoan and Viral killers

BIOL U7933G: Seminar in Special Topics: Molecular Phylogenetics

ECON 7090X Special Topics: Ecological Economics

MUSC U7633X Special Topics Seminar: Music Education - Curriculum and Assessment in Music Education

This topic is being offered for the second time:

MUSC U7631G Special Topics Seminar: History - History of Sound Art